

# Certificate of Analysis

**CLP ICP Calibration Verification Standard #3**

**Catalog Number: ICM-433**

**Lot Number: CL-5040A**

**Lot Issue Date: 02/03/2017**

**Expiration Date: 03/31/2020**

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO Guide 34 / ISO 17025 accredited laboratory, and compared to calibration standards independently prepared using NIST SRM(s). The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

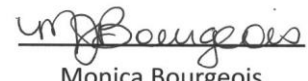
Analyte	True Value			Analytical Method	NIST SRM	
arsenic	500.6	±	2.5	µg/mL	ICP / ICP-MS	3103a
cadmium	250.2	±	1.3	µg/mL	ICP / ICP-MS	3108
lead	500.8	±	2.5	µg/mL	ICP / ICP-MS	3128
selenium	500.8	±	2.5	µg/mL	ICP / ICP-MS	3149
thallium	500.0	±	2.5	µg/mL	ICP / ICP-MS	3158

**Matrix:** 5% nitric acid in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megaohm double deionized water, calibrated Class A glassware, and meticulously cleaned bottles in the manufacturing of ULTRA grade standards. Balances used in the manufacturing of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001.



John Russo  
President



Monica Bourgeois  
Director of QA/RA